Original Article

Recognition of Depression and Anxiety by Non-Psychiatric Residents in a General Hospital

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Objective : The objective of this study was to determine the ability of non-psychiatric (medical and surgical residents) residents on inpatient units to recognize patients with clinically significant depression and anxiety among a cohort admitted to the Dr. Shariati Hospital in Tehran.
Method: Patients within 72 hours of admission underwent screening with the Hospital Anxiety and Depression Scale(HADS). Simultanously the residents caring for the patients was assessed whether they believed that patients had significant depression or anxiety. They should also rate the degree of depression and anxiety of their patients in a 5 point Likert scale.
Results: Assessments were completed for 401 patients. According to HADS score 136(34.25%) patients had probable depressive disorders and 157(39.75%) patients had probable anxiety disorders. The residents only asked from 26(6.4%) and 32(8.2%) patients about depression and anxiety respectively. They identified only 10.2% of patients with probable depressive disorder (HADS-D score>7) and10.8% of patients with probable anxiety disorder(HADS-A score>7). There was no significant correlation of residents' assessment of severity of depression and anxiety with HADS scores. Residents varied in their sensitivity to their patients' depression and anxiety. There was no correlation between residents characteristic (gender and medical or surgical disciplines) and accuracy of probable diagnosis.
Conclusion: Medical and surgical residents routinely under-recognize depression and anxiety among inpatients in medical and surgical wards.

Keywords: Anxiety, *Depression, General hospital, Recognition, Residency*

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Studies in general hospitals have shown that a high proportion of patients treated for somatic illnesses suffer from a coexisting psychiatric disorder (1–6).
Nevertheless, the majority of patients admitted to general hospitals with symptoms of depression receive no specific treatment (7,8). Furthermore, a diagnosis of depression during a nonpsychiatric hospital stay is linked not only to poorer social performance and quality of life (2,9) but also to a less favorable clinical outcome for the basic medical disorder (whatever the latter's severity) (10,11), to a lengthened hospital stay (12–14) and to increased hospitalization costs (15). A significant proportion of patients presenting with a major depressive disorder during the earlier part of their stay at a general hospital show persistent and severe depression on discharge and during follow-up over several months (16,17). Current and effective therapies for depression are well tolerated and are, by and large, compatible with nonpsychiatric treatment.
Physicians in the nonpsychiatric units of university hospitals overlook about half the cases of depression; the proportion of missed cases, inappropriate diagnoses and absence of treatment is higher in recent studies (1,4,18). When all is said and done, only about one case of depression in four receives appropriate therapy at the general hospital (2).
According to our literature review there wasn't any previous systematic study about ability of non-psychiatric residents for recognizing depression and anxiety in general hospital inpatients. The objective of this study was to determine the ability of non-psychiatric (medical and surgical residents) residents on inpatient units to identify patients with clinically significant depression and anxiety among a cohort admitted to the Dr. Shariati Hospital in Tehran.

Materials and Method

Patients who were admitted to Dr. Shariati General Hospital, medical (including general internal medicine, cardiology, endocrinology, rheumatology, nephrology and respiratory disorders units) and surgical (including general surgery, orthopedy, urology and cardiac surgery) wards between February 2006 and march 2007 were recruited for entrance into the study after at

least 72 hours from admission. The sampling method was clustered systematic sampling. Inclusion criteria were: age between 18-65; being fluent in Farsi; and giving the inform consent. Patients with cancer, aphasia and other neurological disorders were excluded from the study. All subjects were assessed using Persian version of Hospital Anxiety and Depression Scale (HADS). It has 2 subscale, one for evaluation of depression (HADS-D) and the other for anxiety (HADS-A).HADS is an instrument that was used for evaluation of anxiety and depression in medical patients in many previous studies(19). Psychometric properties of Persian version of HADS were evaluated in previous studies(20).

In addition, within 24 hours of subjects' assessment the the primary medical or surgical residents caring for patients were asked 3 questions: Did you ask any question about depression or anxiety from this patient? Does this patient have clinically significant depression or anxiety? What do you think about the severity of depression or anxiety? The severity of depression or anxiety was assessed on a five point Likert scale (very mild=1; mild=2; moderate=3; severe=4; very severe=5). Demographic variable of the patients (including age, gender, education, occupation) and residents (including gender and their disciplines) also were obtained. Statistical analysis was performed by computer software (SPSS version 11.1).

Results

Of total 440 patients recruited during the study, 401(91.13%) accepted the assessment or suitable for study. The data was appropriate for analysis only in 397 and 395 subjects in regard with depression and anxiety respectively. Demographic data of the patients are given in Table 1.

According to HADS score 136(34.25%) patients had probable depressive disorders and 157(39.75%) patients had probable anxiety disorders.

Seventy residents (27(38%) female and 43(62%) female) were asked about the study questions. Of total 70 residents 28(40%) were from surgical disciplines and 42(60%) from medical disciplines. The researchers asked questions from residents about anxiety and depression in their patients between 1 to 5 turns, and each residents may be interviewed about 1 to 22 patients through out the study period. The residents only asked from 26(6.4%) and 32(8.2%) patients about depression and anxiety respectively. They identified only 10.2% of patients with probable depressive disorder (HADS-D score>7) and10.8% of patients with probable anxiety disorder(HADS-A score>7). There was no significant correlation of residents' assessment of severity of depression and anxiety with HADS scores.

Residents varied in their sensitivity to their patients' depression and anxiety. There was no significant correlation between residents characteristic (gender and medical or surgical disciplines) and accuracy of probable diagnosis.

Table 1. Demographic characteristics of patients

Variable		Number(%)
Age	18-40	199(50.2%)
	41-65	198(49.8%)
Gender	men	224(55.9%)
	Women	177(44.1%)
Education	Less than high school	134(33.7%)
	High school or more	263(66.3%)
Occupation	employed	254(64%)
	Unemployed	43 (36%)
ward	Surgical	212(54.4%)
	Medical	185(46.6%)

Discussion

The present study confirms, the results of earlier research that had shown high levels of depressive and anxiety disorders as a whole among patients admitted to a major general hospital. It also shows that non-psychiatrist physicians overlook a marked proportion of depression and anxiety diagnoses identified by standardized instruments.

When considering awareness and recognition of depression in medical and surgical general hospital in-patients we must consider the characteristics of this setting, as compared with general practice, where the recognition of depression has been more widely investigated (21,22). In hospital settings: 1) residents know the patients less well than primary care physicians, who have a long-lasting relationship with the patient; 2) the residents committed to solve specific and usually important medical or surgical problems, and may not give such emphasis to psychosocial factors as physicians in primary care; 3) the residents may consider depression an unavoidable response of the patient to severe organic disease or to hospitalization; and 4) the patients may not wish to discuss their mood with residents because of obstacles in the communication (insufficient time available, use of technical medical jargon by the residents, lack of privacy on the ward).

In spite of this limitation, improved residents training in the recognition of depression and anxiety, by addition to knowledge base, interviewing skills, attitude, and awareness may be useful in improving the ability of residents to recognize depression and anxiety in their patients. But previous studies showed that simple self-assessment tools and better diagnostic training for doctors working in general hospitals are not enough to increase recognition of mental health problems(23). We need to establish a collaborative mental health system in our general hospital, to train doctors and nurses continuously, to track the pathway of care of the patients with mental health problems and to follow up them after discharge.

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